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PACE SX-211-214

File

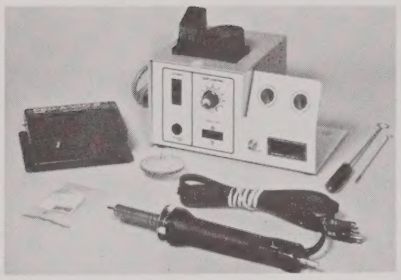
OPERATION AND MAINTENENCE
INSTRUCTIONS 5050-0061

PACE
INCORPORATED

PED-A-VAC®
DESOLDERING SYSTEMS

(For models using PED-A-VAC II & III)

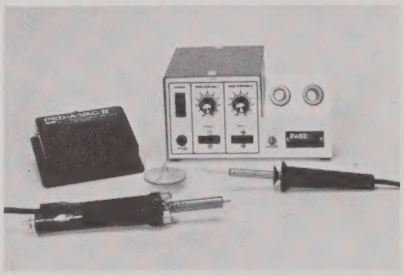
With Thermo Drive® Heat Control



1. Model SX-212BE with 24VAC Sodr-X-Tractor and Model SX-213AE with 115VAC 40 Watt Sodr-X-Tractor (Model SX-213AE not shown is equipped with a 115VAC outlet.)

2. Model SX-213A and Model SX-213AJ with 115VAC 60 watt Sodr-X-Tractor.

3. Model SX-214A and Model SX-214AJ with 115VAC 60 watt Sodr-X-Tractor.



4. Model SX-215BE with 24VAC Sodr-X-Tractor.

Introduction

The Pace PED-A-VAC desoldering systems provides everything needed for fast reliable component removal.

The System Consists of:

A Power Source for conversion and control of the electrical output power. A convenient tip cleaning system attaches to the top of the Power Source housing. A holder is also provided for safe convenient prepositioning of the heated tools.

The PED-A-VAC Foot Unit provides spike free pheumatic switching for the vacuum power.

The Sodr-X-Tractor utilizes controlled temperature and vacuum for easy removal of virtually any type of solder joint.

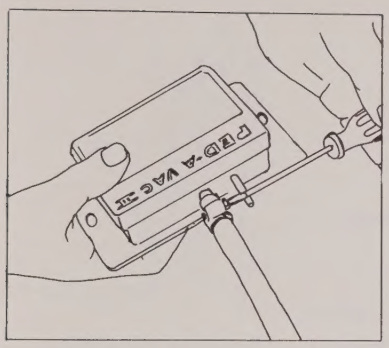
Included are vacuum hose, hose to line clips, cleaning brushes, tip kit and VisiFilter™.

A Soldering Iron is provided with some systems providing the capability to quickly resolder the new component in place.

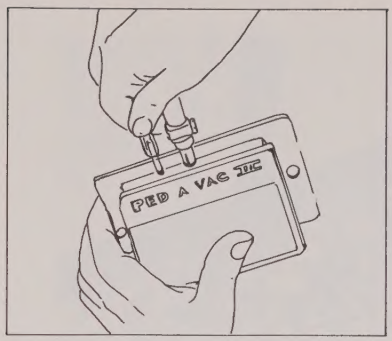
Take a few minutes to look over the instructions and follow the maintenance procedures outlined and your PED-A-VAC will give you long reliable service

EQUIPMENT PROVIDED	PED-A-VAC Model SX-212B (and Export Models) Sodr-X-Tractor tool (24VAC, 50/60Hz) with vacuum line, cleaning brushes, and replaceable tips. Ped-A-Vac Foot Pedal Unit Integral Power Supply with Temperature Control, 24VAC, 50/60Hz output, tool holders, and tip cleaning unit.	PED-A-VAC Model SX-213A (and Export Models) Sodr-X-Tractor tool (115VAC, 50/60Hz) with vacuum line, cleaning brushes and replaceable tips. Ped-A-Vac Foot Pedal Unit Integral Power Supply with Temperature Control and 115VAC, 50/60Hz output, tool holders, and tip cleaning unit.	PED-A-VAC Model SX-214A (and Export Models) Sodr-X-Tractor tool (115VAC, 50/60Hz) and Soldering Iron (115VAC, 50/60Hz), vacuum line, cleaning brushes and replaceable tips. Ped-A-Vac Foot Pedal Unit Integral Power Supply with two Temperature Controls and two 115VAC, 50/60Hz outputs, tool holders, and tip cleaning unit.	PED-A-VAC Model SX215B (and Export Models) Sodr-X-Tractor tool (24VAC, 50/60Hz)and Soldering Iron (24VAC, 50/60 Hz), vacuum line, cleaning brushes, and replaceable tips. Ped-A-Vac Foot Pedal Unit Integral Power Supply with two Temperature Controls and two 24VAC, 50/50Hz outputs, tool holders, and tip cleaning unit.
ELECTRICAL POWER REQUIRED	115VAC, 50/60Hz (SX-212B) Special 220/240VAC, 50/60Hz (SX-212BE) 100VAC, 50/60Hz (SX-212BJ) Special 24VAC, 50/60Hz (SX-212BL) Special	115VAC, 50/60Hz (SX-213A) 220/240VAC, 50/60Hz (SX-213E) 100VAC, 50/60Hz (SX-213AJ)	115VAC, 50/60Hz (SX-214A) 220/240VAC, 50/60Hz (SX-214E) Special 100VAC, 50/60Hz (SX-214EJ)	115VAC, 50/60Hz (SX-215B) Special 220/240VAC, 50/60Hz (SX-215BE)
SHOP AIR REQUIRED	4.0cfm 60-90psi (nominal)	4.0cfm 60-90psi (nominal)	4.0cfm 60-90psi (nominal)	4.0cfm 60-90psi (nominal)
DIMENSIONS Handpiece Integral Power Supply and Stand Ped-A-Vac Foot Pedal	9" long, 1⅛" wide, 5 oz. 6⅛" x 4-3/4" x 8-3/4" 1-3/4" x 5⅛" x 5" SX-212BL has same dimensions as SX-213A.	9" long, 1⅛" wide, 5 oz. 7" x 4-3/4" x 5" 1-3/4" x 5⅛" x 5" SX-213E has same dimensions as SX-212B.	9" long, 1⅛" wide, 5oz. 6⅛" x 4-3/4" x 8-3/4" 1-3/4" x 5⅛" x 5"	9" long, 1⅛" wide, 5oz. 6⅛" x 4-3/4" x 8-3/4" 1-3/4" x 5⅛" x 5"
SHIPPING WEIGHT	7 pounds	7 pounds	8 pounds	8 pounds
	Where use of central factory vacuum is desired, a "V" Series Ped-A-Vac is available, and should be so noted when ordering.			

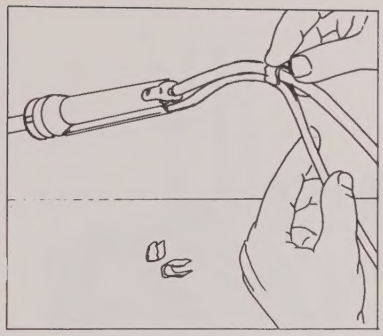
SET UP



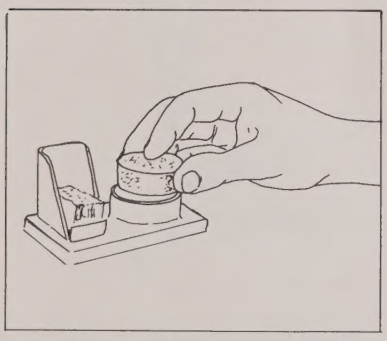
1. Attach filtered air supply regulated to between 60 and 90 psi to input pipe at rear of PED-A-VAC Filtered air will assure trouble-free operation. Use quick connect fittings or hose clamps.



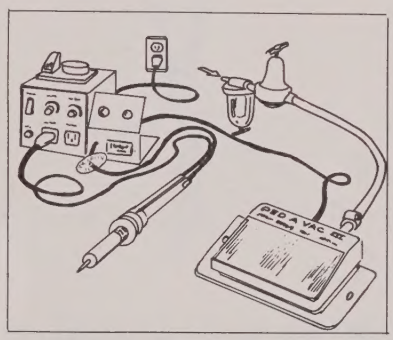
2. Attach the supplied hose to vacuum fitting. Place PED-A-VAC Foot Unit in a convenient location for foot operation.



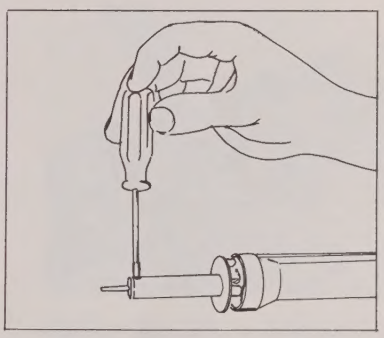
3. Attach vacuum hose to fitting at rear of the SODR-X-TRACTOR Handpiece. Assemble black nylon clips to conveniently attach Vacuum hose to SODR-X-TRACTOR Power Cord.



4. Remove and soak sponge in warm water. Replace in cleaning unit container.

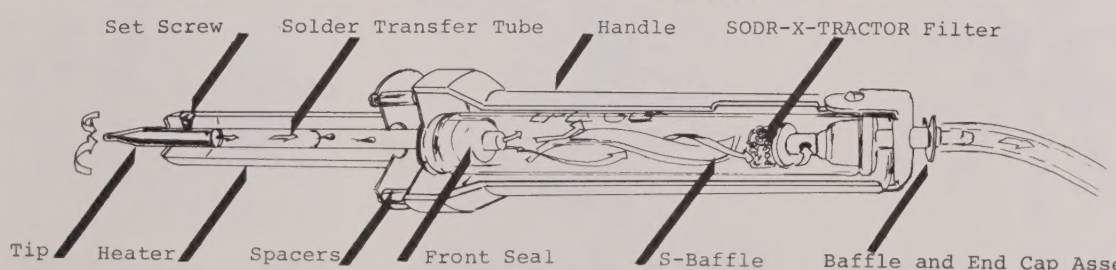


5. Pictorial Schematic of PED-A-VAC System Set-up for operation.



6. Select proper tip and heat setting for the job. Please read and follow simple instructions for best results.

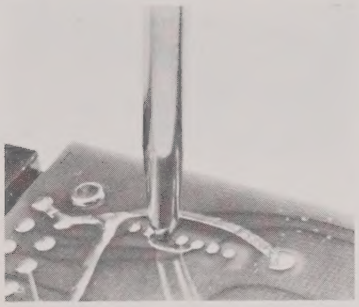
PED-A-VAC DESOLDERING SYSTEM OPERATING PRINCIPLE



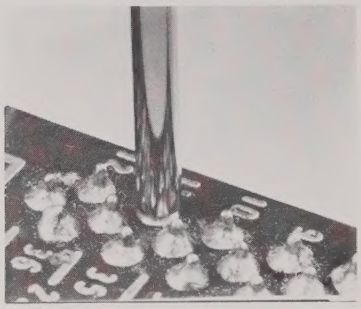
The PED-A-VAC II Desoldering System functions as a vacuum cleaning device for solder removal. The heated SODR-X-TRACTOR tip quickly melts the solder. Depressing the PED-A-VAC activates the vacuum airflow, transferring the solder from the circuit board to the protective safety chamber in the handle.

Pneumatic switching in the PED-A-VAC eliminates electrical spikes which may damage highly sensitive MOSFET and C-MOS devices.

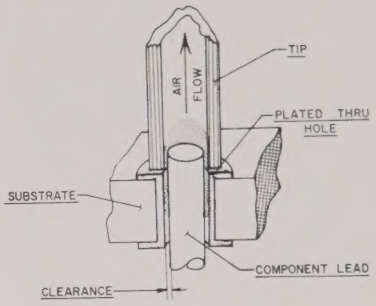
TIP SELECTOR GUIDE



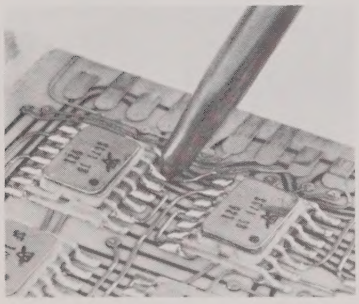
1. Match the tip to the work. Small tips for small pads.



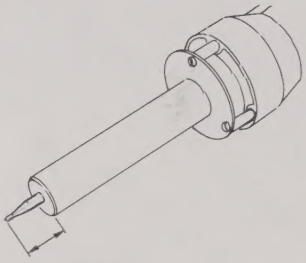
2. Larger tips for heavier work.



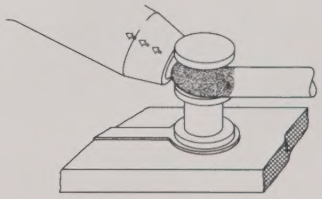
3. The tip should fit loosely over the component lead to be desoldered. The loose fit provides the necessary clearance for air and molten solder flow.



4. The O.D. of the tip should be smaller than diameter or width of the pad. Keep the hot tip in contact with the pad, not the substrate.

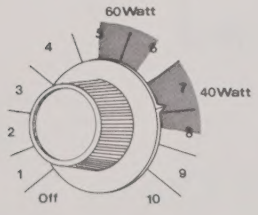


5. The selected tip extends approximately 5/8" or 1.5cm beyond the heater body for all normal desoldering.

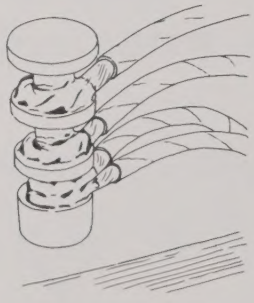


6. Use the largest tip which can be applied to the soldered area to be extracted.

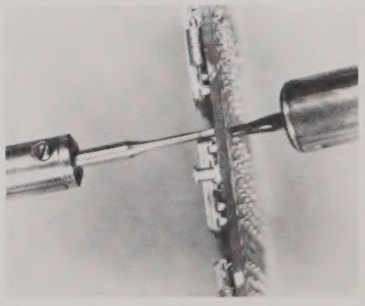
HEAT SELECTION



1. Adjust operating temperature for extractor. 6.5-8 for 40 Watt heater. 5-6 for 60 Watt heater.

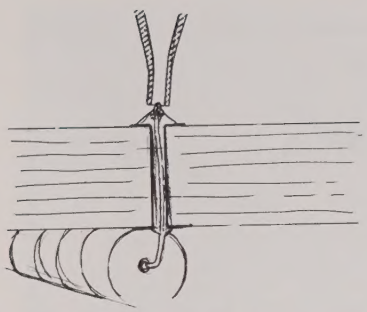


2. Higher temperature settings may be required for solder extraction on large turret terminals or multilayered printed circuit boards.

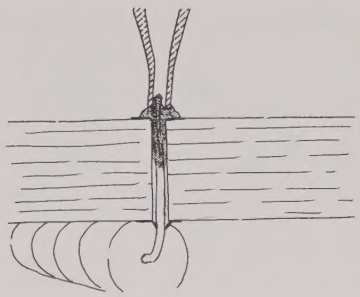


3. Auxiliary heating is required if extractor tip alone can not melt solder joint in 3 seconds or less.

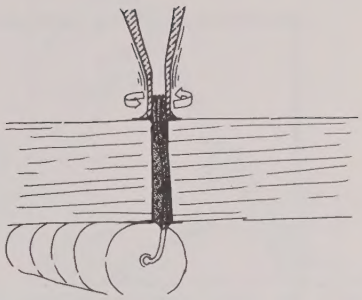
OPERATION



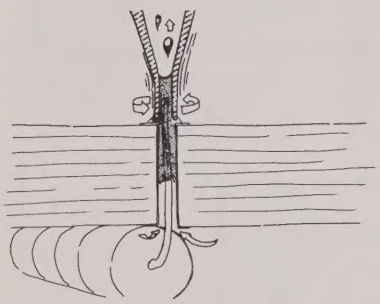
1. Select the proper dia. tip per Tip Selection Guide. Select heat setting.



2. Place tip at end of clinched lead, lift lead to perpendicular position. Slip tip over lead as shown.

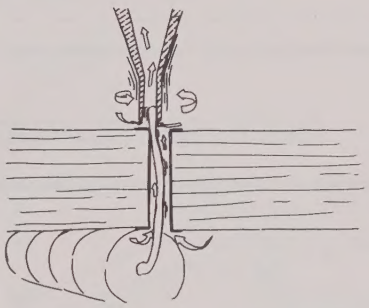


3. Move Desoldering Tool with rotary stirring motion dwelling until the lead moves freely within hole. Free movement of lead within the hole indicates complete solder melt ready for extraction.

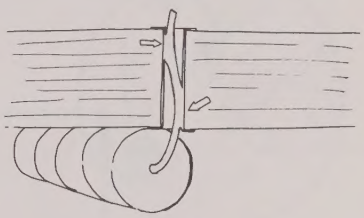


4. Apply vacuum and continue stirring action during Vacuum application.

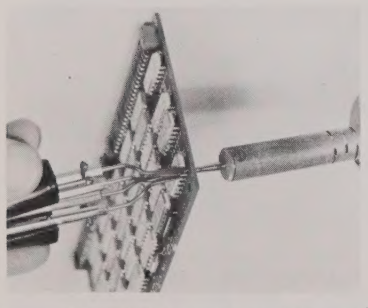
NOTE: - Tip is in light contact only with pad. Heat transfer is through the lead wire and molten solder; not the pad and hole plating.



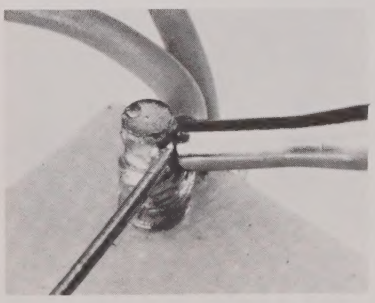
5. Continue Tip Motion and Vacuum Flow to cool joint area. Vacuum Air Flow must continue for a second or so after the tip is removed from the work. CAUTION: - Don't push; light contact between the pad and the tip works best.



6. Check your work. If all solder is not extracted from any thruplated hole, re-solder and extract again. Allow cool down between soldering and extraction



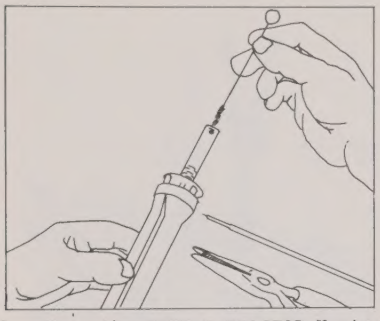
7. Solder joint removal from multilayer printed circuit boards may require application of a second heating source. Auxiliary heat can be applied with the PACE ConducTweez Heating System or with a soldering iron tip.



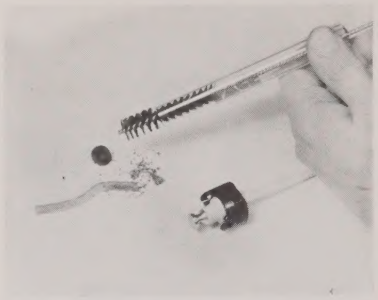
8. Place heated extractor tip in intimate contact with wire and solder; watch for complete solder melt.
Apply motion to wire. Depress PED-A-VAC to activate vacuum and extract solder.

9. Tips may be modified by filing, notching or bending for special desoldering applications.

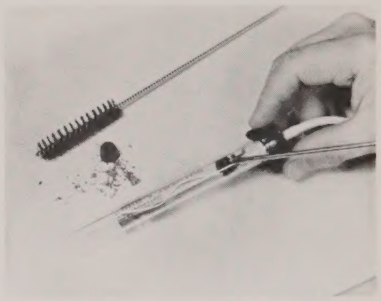
CARE AND MAINTENANCE OF SODR-X-TRACTOR



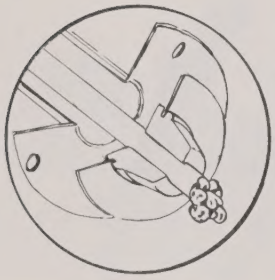
1. Keep the SODR-X-TRACTOR Heater Tube Assembly clean with the wire brush.



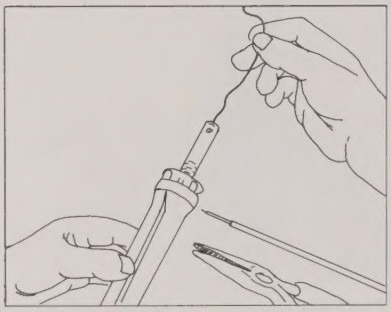
2. Use the bristle brush to clean the Glass Chamber and S-Baffle. Lightly coat inside of chamber with mineral oil to ease cleaning.



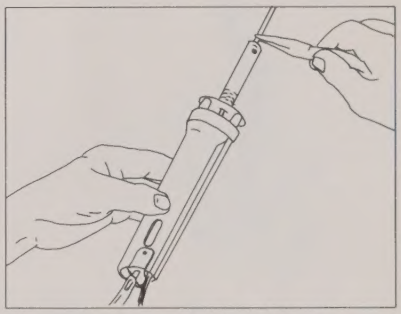
3. The SODR-X-TRACTOR Filter at rear of Glass Chamber prevents flux and coating residues from reaching the PED-A-VAC. Replace filter as required, for maximum air flow.



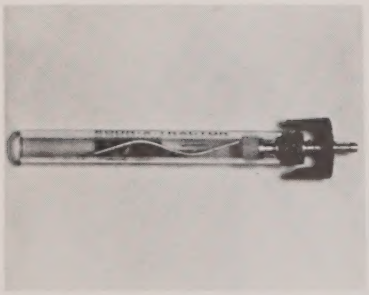
4. Heater tube blockage may result from failure to maintain Vacuum flow 2 seconds after solder joint extraction.



5. To clear blockage, remove tip, set heat to maximum, melt about 18" of 1/16" solder into heater tube.



6. Insert a 3/32" dia. copper or brass rod into heater tube. Solder and rod transfer heat to melt and clear blockage.



7. S-Baffle must fit firmly in place away from heater. Bend for firm retention.

8. To replace heater, disconnect cord and allow it to cool; remove 3 heater retaining screws and ground terminal hardware, pull center ground wire through handle.

9. Carefully slide heater connector pins from line cord receptacles. Reverse operation to install new heater and seal assembly.

CARE AND MAINTENANCE OF PED-A-VAC III FOOT PEDAL ASSEMBLY

Clearing Ped-A-Vac Foot Pedal Assembly of flux and unfilterable line contaminants:

a) Remove the cover from the Ped-A-Vac by removing the two hex head slotted screws in the sides of the unit and the 4-40 filister head screw in the top of the unit.

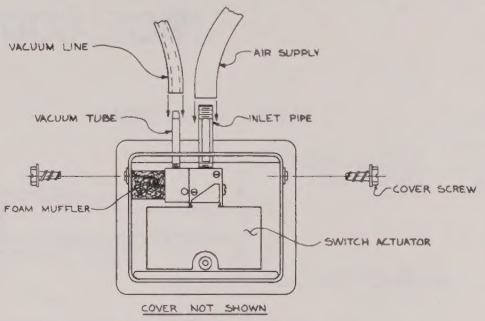
b) Remove foam muffler, then clean by soaking in PACE solvent (P/N 6997-0001) for approximately 5 minutes. Allow to dry completely before reinstalling the muffler.

c) Draw approximately .2 oz. (6cc) of PACE solvent thru vacuum generator. This is done by placing vacuum line in solvent and actuating the switch.

d) Disconnect air supply and remove the inlet pipe. Remove tapered spring and value. Swab clean the valve bore using PACE solvent on a cotton swab. Lubricate the valve sparingly with silicone grease (use Parker Super-O-Lube or equivalent).

e) Reassemble valve, spring, and inlet pipe.

f) Replace foam muffler and cover. The Ped-A-Vac is then ready for service.



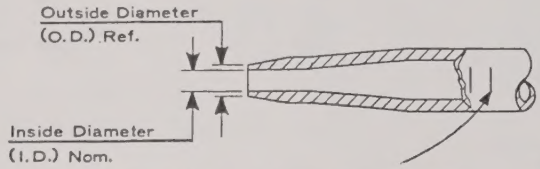
NOTE: The lubrication of the valve is necessary each time the Ped-A-Vac is cleaned or once a month.

TROUBLESHOOTING

Symptom	Cause and Remedy
1. Loss of Vacuum from Ped-A-Vac	A. Incorrect air supply pressure or flow. Check air line pressure and flow. Should be 70 to 80 psi., 4.0 cfm.
	B. Hole in Vacuum Line. Replace Vacuum Line.
	C. Vacuum Line Disconnected. Re-attach Vacuum Line to Sodr-X-Tractor Handpiece and Ped-A-Vac foot pedal.
	D. Vacuum Generator restriction. Service Vacuum Generator.
2. Continuous Vacuum	A. Air valve clogged with contaminants. Clean Vacuum Generator
	B. Air valve requires lubrication. Lubricate Vacuum Generator.

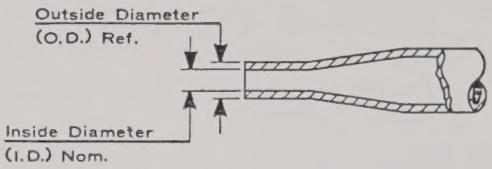
PACE SODR-X-TRACTOR TIPS

SUPER & STANDARD



Super tips have two I.D. marks. **(trade mark)**

ECONOMY



SUPER TIPS

I.D. Nom.		O.D. Ref.		
Ins.	mm	Ins.	mm	PACE Part No.
.061	1.55	.104	2.64	1121-0217
.050	1.27	.085	2.16	1121-0216
.036	.91	.072	1.83	1121-0215
.025	.63	.060	1.52	1121-0214
.018	.45	.053	1.34	1121-0213

STANDARD TIPS

.061	1.55	.104	2.64	1121-0246
.050	1.27	.085	2.16	1121-0245
.036	.91	.072	1.83	1121-0244
.025	.63	.060	1.52	1121-0243
.018	.45	.053	1.34	1121-0242

ECONOMY TIPS

.095	2.43	.125	3.17	1121-0091
.061	1.55	.100	2.54	1121-0092
.036	.91	.087	2.21	1121-0093
.025	.63	.080	2.03	1121-0094

REPLACEMENT PARTS

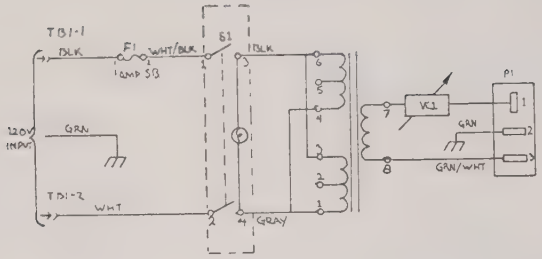
Power Source PED-A-VAC

Description	Models	Qty/Unit	Part No.
PED-A-VAC			
Foot Pedal Assy	All SX-Models	1	6014-0005
Ped-A-VAC			
Foot Pedal Assy	All VSX-Models	1	6014-0003
Overhaul Kit	All SX-Models	1	6993-0043
Knob	All Models	1 or 2	1222-0006
Fuse Holder	VSX-213A, SX-213A, SX-213AJ SX-212B, VSX-212B	1	1161-0002
Fuse Holder	SX-212BL, SX-215BE, SX-212BE VSX-212BE, SX-213AE, VSX-213AE	1	1161-0008
AC Var. Voltage Controller 115VAC	SX-213A, SX-213AJ SX-213AE, VSX-213AE	1 or 2	1285-0014
AC Var. Voltage Controller 24VAC	SX-212B, VSX-212B SX-212BL, SX-215BE SX-212BE, VSX-212BE	1 or 2	1285-0030
Fuse 1 Amp SloBlo	SX-213AE, VSX-213AE	1	1159-0216
Fuse 1 Amp SloBlo	SX-213A, SX-213AJ	1	1159-0011
Fuse 1 Amp SloBlo	SX-212B, VSX-212B	1	1159-0020
Fuse .5 Amp SloBlo	SX-215BE, SX-212BE, VSX-212BE	1	1159-0213
Fuse 2 Amp	SX-212BL	1	1159-0113
Transformer	SX-213AE, VSX-213AE	1	1192-0028
Transformer	SX-215BE	1	1192-0042
Transformer	SX-212BE, VSX-212BE	1	1192-0029

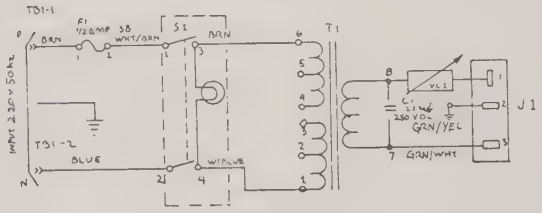
Sodr-X-Tractor Replacement Parts

Description	Model	Qty/Unit	Part No.
Sodr-X-Tractor 115 VAC, 60 Watt	SX-201	1	7010-0011
Sodr-X-Tractor	SX-199	1	7010-0017
Tube Ass'y 6', Clear		2	1325-0003
VisiFilter™	Fixed Type	1	1309-0020
VisiFilter™	Replaceable Element Type	1	1309-0028
Replaceable Elements for VisiFilter 1309-0028		10/pk	1309-0027
Handle	All	1	6010-0024
Baffle & End Cap Assy.	All	1	4010-0031
Chamber, glass	All	1	1265-0003
Spacer and Hardware Kit	All	1	6993-0014
Seal, .240 I.D., forward	All	1	1213-0008
Seal, rear	All	1	1213-0001
Heater & Seal Assy (120VAC			6010-0013
60 watt, std)		1	6010-0015
Heater & Seal Assy (24VAC) 40 watt		1	6010-0016
Filter, Sodr-X-Tractor	All	pk/5	1309-0018
Set Screw	All	pk/10	1348-0285
Brush, bristle (Chamber Cleaning)	All	pk/5	1127-0002
Brush, wire	All	pk/5	1127-0006
Power Cord Assy. 115VAC		1	1332-0009
Power Cord Assy. 24VAC		1	1332-0032
Clamps, Hose to Cord	All	pk/6	1211-0002
S Baffle	All	1	4010-0033
Cleaning Unit Assy, Comp	All	1	6021-0001
a) Cap		1	1313-0007
b) Sponge		pk/5	4021-0001
c) Brush		1	1127-0012
Experimenter Tip Kit, consisting of: 2 ea Tips 1121-0214;0215;0217 1 ea Set Screw; lea Sodr-X-Tractor Filter	All	1	6993-0038

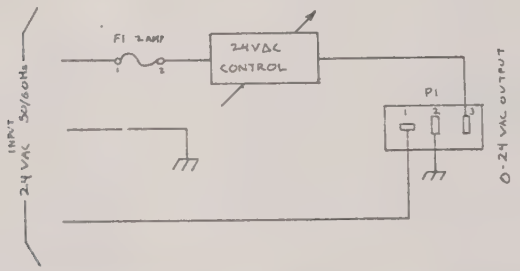
SCHEMATICS



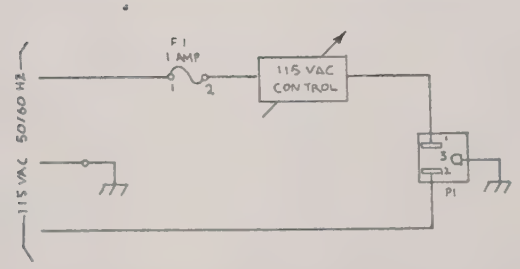
POWER SOURCE PPS-4B USED WITH MODELS SX-212B AND VSX-212B



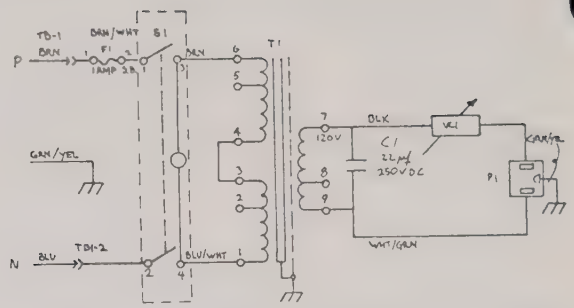
POWER SOURCE PPS-4BE USED WITH MODELS SX-212BE AND VSX-212BE



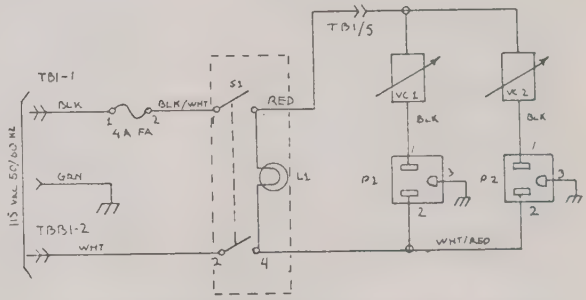
POWER SOURCE USED WITH MODEL SX-212BL



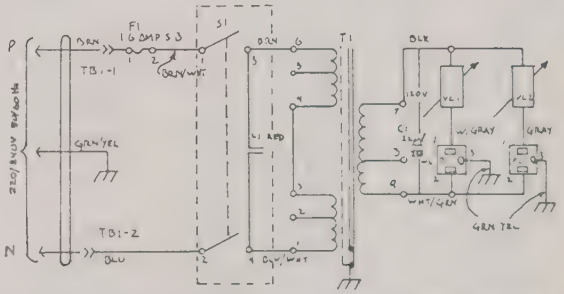
POWER SOURCE USED WITH MODEL SX-213A AND SX-213AJ



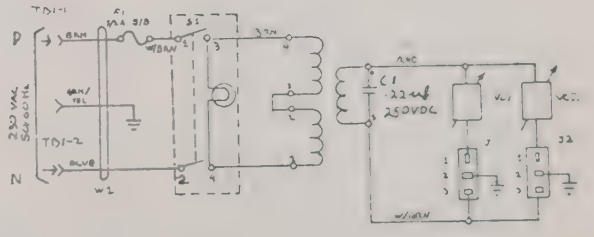
POWER SOURCE PPS-6AE USED WITH MODELS SX-213AE AND VSX-213AE



POWER SOURCE PPS-8A USED WITH MODELS SX-214A AND VSX-214A



POWER SOURCE PPS-8AE USED WITH MODELS SX-214AE, VSX-214AE AND SX-214AJ



POWER SOURCE PPS-7BE USED WITH MODEL SX-215BE

NOTES

PACE™

INCORPORATED

SILVER SPRING, MARYLAND 20910 U.S.A.

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PACE™ INCORPORATED
SILVER SPRING, MARYLAND 20910 U.S.A.

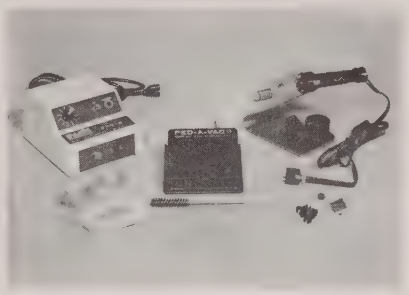
PED-A-VAC II™ Desoldering System

OPERATION AND MAINTENANCE INSTRUCTIONS

Model SX-211

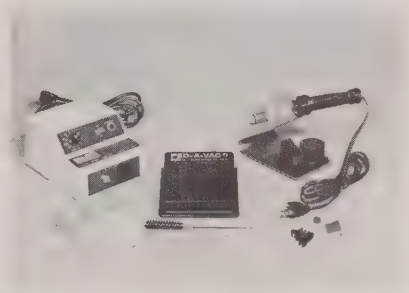
EQUIPMENT PROVIDED:
SODR-X-TRACTOR tool, Model SX-185 (115VAC, 50/60 Hz) with single air line, cleaning brushes and set of replaceable tips.
PED-A-VAC II Foot Unit.
Temperature Control Power Supply (115VAC, 60 Hz output)
Accessory stand with tool holders and tip-cleaning unit.
ELECTRICAL POWER REQUIRED
115VAC, 60 Hz.
SHOP AIR REQUIRED
*4.0 cfm 70-80 psi (nominal)

*Momentary flow during operation



Model SX-212

EQUIPMENT PROVIDED
SODR-X-TRACTOR tool, Model SX-190 (24VAC, 50/60 Hz) with single air line, cleaning brushes and set of replaceable tips.
PED-A-VAC II Foot Unit.
Temperature Control Power Supply (24VAC output.)
Accessory stand with tool holders and tip-cleaning unit.
ELECTRICAL POWER REQUIRED
Model SX-212
115VAC, 60 Hz
Model SX-212E
230VAC, 50 Hz
Model SX-212EJ
100VAC, 50 HZ
SHOP AIR REQUIRED
*4.0 cfm 70-80 psi (nominal)
ALL MODELS
*Momentary flow during operation

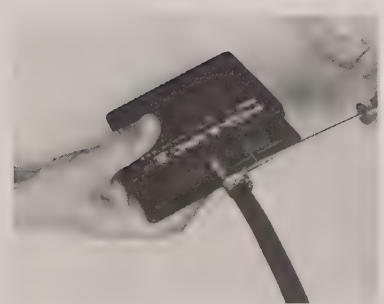


Model SX-213 & SX-214

EQUIPMENT PROVIDED:
SODR-X-TRACTOR tool, Model SX-185 (115VAC, 50/60 Hz) with single air line, cleaning brushes and set of replaceable tips.
PED-A-VAC II Foot Unit.
Temperature Control Power Supply (115VAC, 60 Hz output)
Accessory stand with tool holder and tip-cleaning unit.
ELECTRICAL POWER REQUIRED
Model SX-213 & SX-214
115VAC, 60 Hz
Model SX-213E & SX-214E
230VAC, 50 Hz
Model SX-213EJ & SX-214EJ
100VAC, 50 Hz
SHOP AIR REQUIRED:
*4.0 cfm 70-80 psi (nominal)
ALL MODELS

*Momentary flow during operation

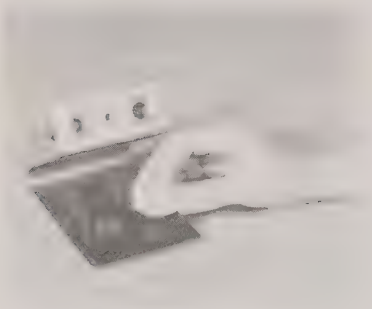
SET-UP



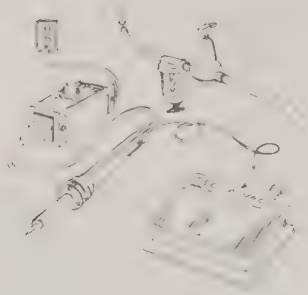
1. Attach filtered air supply regulated to between 70 and 80 psi to input pipe at rear of PED-A-VAC II. Filtered air will assure trouble-free operation. Use quick connect fittings or hose clamps.

2. Attach the supplied hose to vacuum fitting. Place PED-A-VAC II Foot Unit in a convenient location.

3. Attach Vacuum hose to fitting at rear of the SODR-X-TRACTOR Tool. Assemble black nylon clips to conveniently attach Vacuum hose to SODR-X-TRACTOR Power Cord.



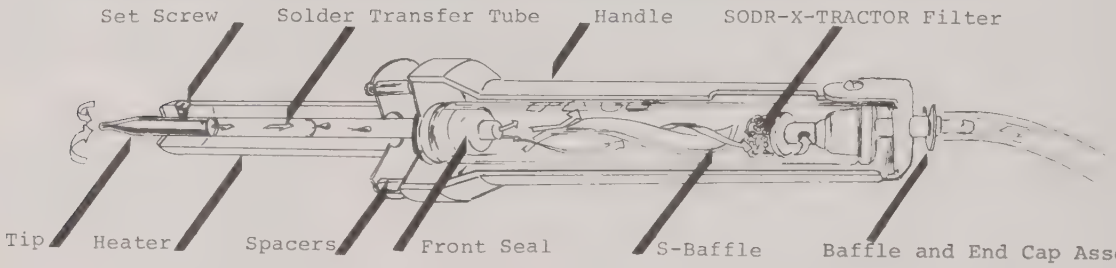
4. Remove and soak sponge in warm water. Replace in cleaning unit container.



5. Pictorial Schematic of PED-A-VAC II System Set-up for operation.

6. Select proper tip and heat setting for the job. Please read and follow the simple instructions for best results.

PED-A-VAC II DESOLDERING SYSTEM OPERATING PRINCIPLE

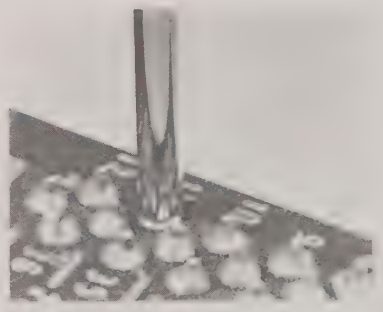


The PED-A-VAC II Desoldering System functions as a vacuum cleaning device for solder removal. The heated SODR-X-TRACTOR tip quickly melts the solder. Depressing the PED-A-VAC activates the vacuum airflow, transferring the solder from the circuit board to the protective safety chamber in the handle.

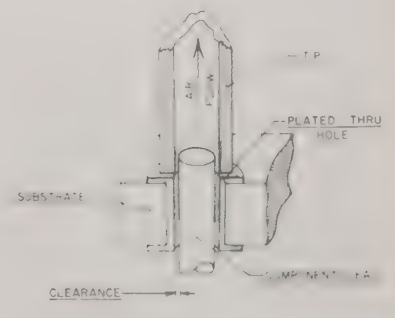
Pneumatic switching in the PED-A-VAC II eliminates electrical spikes which may damage highly sensitive MOSFET and C-MOS devices.

TIP SELECTOR GUIDE

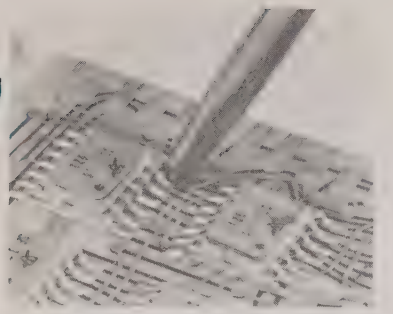
1. Match the tip to the work. Small tips for small pads.



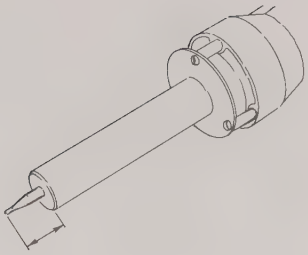
2. Large tips for heavier work.



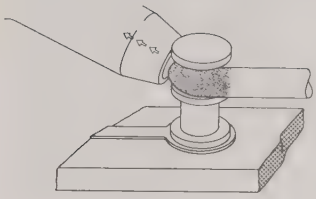
3. The tip should fit loosely over the component lead to be desoldered. The loose fit provides the necessary clearance for air and molten solder flow.



4. The O.D. of the tip should be smaller than diameter or width of the pad, to keep the hot tip in contact with the pad; not the substrate.

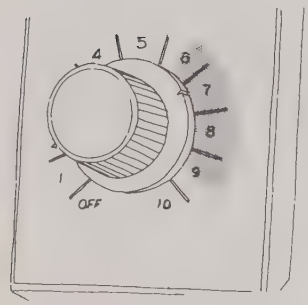


5. The selected tip extends approximately 5/8" or 1.5cm beyond the heater body for all normal desoldering.

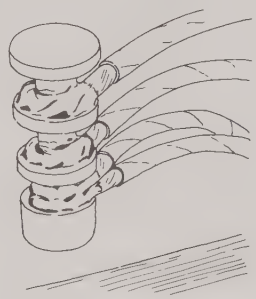


6. Use the largest tip which can be applied to the soldered area to be extracted.

HEAT SELECTION



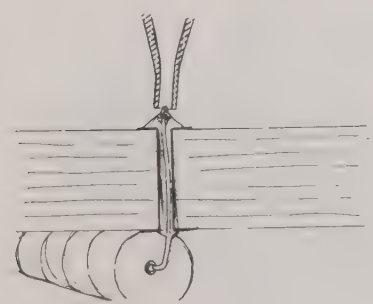
1. Most Solder joints can be extracted with a heat reference setting of between 6 and 9. As a general rule, always use the maximum heat to which you can safely react.



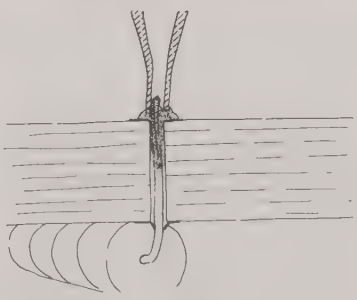
2. Higher temperature settings may be required for solder extraction on large turret terminals or multi-layered printed circuit boards.

3. Auxiliary heating is required if extractor tip alone can not melt solder joint in 3 1/2 seconds or less.

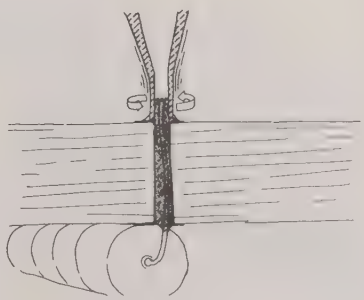
OPERATION



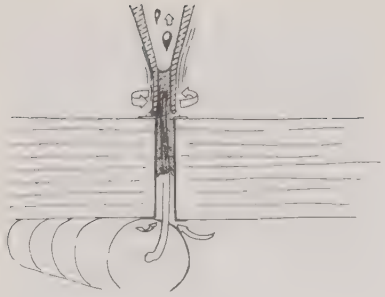
1. Select the proper dia. tip per Tip Selection guide. Select heat setting.



2. Slip tip over lead perpendicular to the PCB.

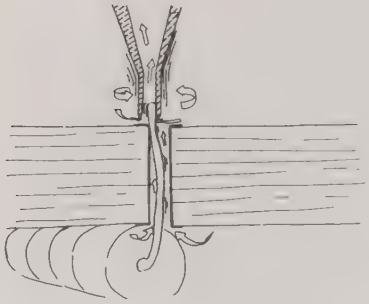


3. Move Desoldering Tool with rotary stirring motion dwelling until the lead moves freely within hole. Free movement of lead within the hole indicates complete solder melt ready for extraction.

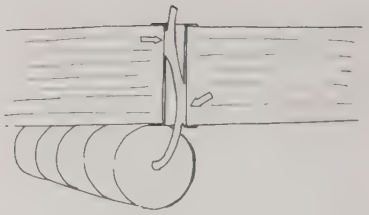


4. Apply vacuum and continue stirring action during Vacuum application.

NOTE: - Tip is in light contact only with pad. Heat transfer is through the lead wire and molten solder; not the pad and hole plating.

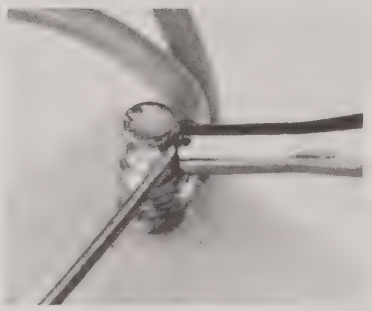


5. Continue Tip Motion and Vacuum Flow to cool joint area. Vacuum Air Flow must continue for a second or so after the tip is removed from the work. CAUTION:- Don't push; light contact between the pad and the tip works best.



6. Check your work. If all solder is not extracted from any thru-plated hole, re-solder and extract again. Allow cool down between soldering and extraction.

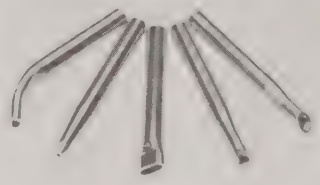
7. Solder joint removal from multilayer printed circuit boards may require application of a second heating source. Auxiliary heat can be applied with the PACE ConducTweez Heating System or with a soldering iron tip.



8. Place heated extractor tip in intimate contact with wire and solder; watch for complete solder melt.

Apply motion to wire.

Depress PED-A-VAC to activate vacuum and extract solder.



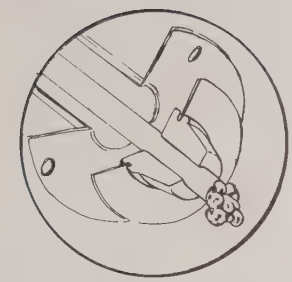
9. Tips may be modified by filing, notching or bending for special desoldering applications.

CARE AND MAINTENANCE OF SODR-X-TRACTOR

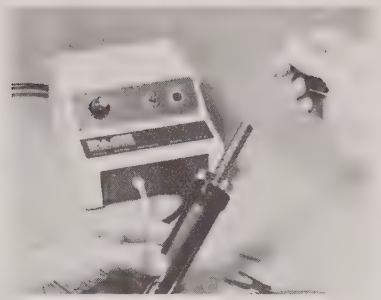
1. Keep the SODR-X-TRACTOR Heater Tube Assembly clean with the wire brush.

2. Use the bristle brush to clean the Glass Chamber and S-Baffle. Lightly coat inside of chamber with mineral oil to ease cleaning.

3. The SODR-X-TRACTOR Filter at rear of Glass Chamber prevents flux and coating residues from reaching the PED-A-VAC. Replace filter as required, for maximum air flow.

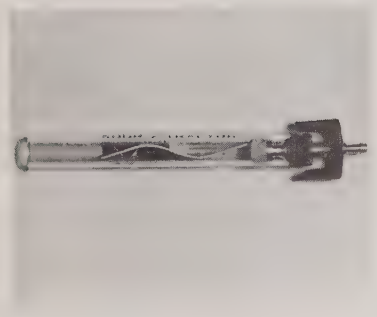


4. Heater tube blockage may result from failure to maintain Vacuum flow 2 seconds after solder joint extraction.



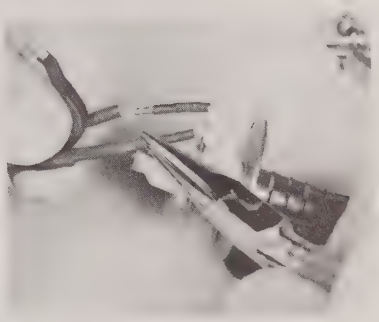
5. To clear blockage, remove tip, set heat to maximum, melt about 18" of 1/16" solder into heater tube.

6. Insert a 3/32" dia. copper or brass rod into heater tube. Solder and rod transfer heat to melt and clear blockage.



7. S-Baffle must fit firmly in place away from heater. Bend for firm retention.

8. To replace heater, disconnect cord and allow it to cool; remove 3 heater retaining screws, pull center ground wire through handle. NOTE:- Ground lug and metal spacer are assembled on same screw.



9. Carefully slide heater connector pins from line cord receptacles. Reverse operation to install new heater and seal assembly.

CARE AND MAINTENANCE OF PED-A-VAC II FOOT PEDAL ASSEMBLY

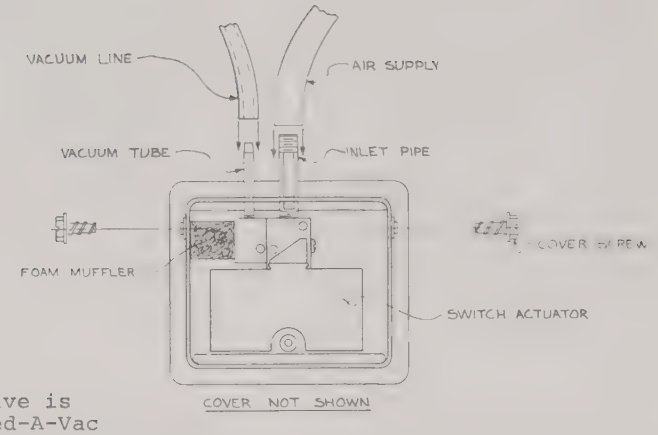
Clearing Ped-A-Vac II Foot Pedal Assembly of flux and unfilterable line contaminants:

a) Remove the cover from the Ped-A-Vac II by removing the two hex head slotted screws in the sides of the unit and the 4-40 filister head screw in the top of the unit.

b) Remove foam muffler, then clean by soaking in PACE solvent (P/N 6997-0001) for approximately 5 minutes. Allow to dry completely before reinstalling the muffler.

c) Draw approximately .2 oz. (6cc) of PACE solvent thru vacuum generator. This is done by placing vacuum line in solvent and actuating the switch.

d) Disconnect air supply and remove the inlet pipe. Remove tapered spring and value. Swab clean the valve bore using PACE solvent on a cotton swab. Lubricate the valve sparingly with silicone grease (use Parker Super-O-Lube or equivalent).



NOTE: The lubrication of the valve is necessary each time the Ped-A-Vac is cleaned or once a month.

e) Reassemble valve, spring, and inlet pipe.

f) Replace foam muffler and cover. The Ped-A-Vac is then ready for service.

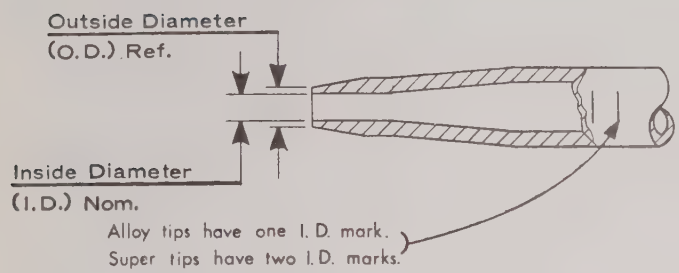
TROUBLESHOOTING

Symptom	Cause and Remedy
1. Loss of Vacuum from Ped-A-Vac II	A. Incorrect air supply pressure or flow. Check air line pressure and flow. Should be 70 to 80 psi., 4.0 cfm.
	B. Hole in Vacuum Line. Replace Vacuum Line.
	C. Vacuum Line Disconnected. Re-attach Vacuum Line to Sodr-X-Tractor Handpiece and Ped-A-Vac foot pedal.
	D. Vacuum Generator restriction. Service Vacuum Generator.
2. Continuous Vacuum	A. Air valve clogged with contaminants. Clean Vacuum Generator
	B. Air valve requires lubrication. Lubricate Vacuum Generator.

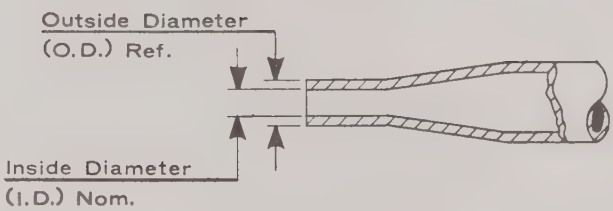
PACE, INC.
Silver Spring, MD

SODR-X-TRACTOR TIPS

SUPER & ALLOY



DOUBLE WALL



I. D. Nom.		O. D. Ref.		SUPER TIPS (Heavy Walled, Chamfered, Dual Clad, Copper)
Ins.	mm	Ins.	mm	PACE Part No.
.095	2.413	.125	3.175	1121-0091*
.061	1.549	.104	2.642	1121-0217
.050	1.270	.085	2.159	1121-0216
.036	.914	.072	1.829	1121-0215
.025	.635	.060	1.524	1121-0214
.018	.457	.053	1.346	1121-0213

*Not Chamfered

				ALLOY TIPS (Chamfered, Dual Clad)
.068	1.727	.125	3.175	1121-0115
.036	0.914	.072	1.829	1121-0117
.025	0.635	.060	1.524	1121-0118

				DOUBLE WALL TIPS (Dual Clad, Copper & Steel)
.057	1.447	.125	3.175	1121-0097
.036	0.914	.104	2.642	1121-0098
.025	0.635	.102	2.591	1121-0099

PED-A-VAC II
REPLACEMENT PARTS

Description	Models	Qty/Unit	Part No.
Power Supply			
Temperature Controller	SX-211	1	7008-0042
Foot Pedal Assy.	All	1	6014-0005
Overhaul Kit	All	1	6993-0043
AC Var. Voltage Controller (230V)	SX-212E	1	1285-0018
AC Var. Voltage Controller (115V)	SX-212;SX-212EJ SX-213;SX-213E SX-212EJ;SX-213E	1	1285-0014
Fuse, 1/2 amp	SX-212;SX-212E SX-212EJ	1	1159-0010
Fuse, 2 amp	SX-211;SX-213; SX-213EJ	1	1159-0004
Sodr-X-Tractor SX-190	SX-212;SX-212E; SX-212EJ	1	7010-0007
Sodr-X-Tractor SX-185	SX-211;SX-213; SX-213E;SX-213EJ	1	7010-0006
Handle	All	1	6010-0024
Tube Assy w/male fitting	All	1	1325-0006
Fitting, male	All	1	1263-0004
Baffle & End Cap Assy.	All	1	4010-0031
Chamber, glass	All	1	1265-0003
Spacer and Hardware Kit	All	1	6993-0014
Seal, .240 I.D., forward	All	1	1213-0008
Seal, rear	All	1	1213-0001
Heater & Seal Assy (40 watt, std)	SX-211;SX-213 SX-213E;SX-213EJ	1	6010-0013
Heater & Seal Assy (24VAC) 40 watt	SX-212;SX-212E SX-212EJ	1	6010-0016
Filter, Sodr-X-Tractor	All	pk/5	1309-0018
Set Screw	All	pk/10	1348-0285
Brush, bristle (Chamber Cleaning)	All	pk/5	1127-0002
Brush, wire	All	pk/5	1127-0006
Power Cord Assy.	SX-211;SX-213; SX-213E;SX-213EJ	1	1332-0009
Power Cord Assy.	SX-212;SX-212E SX-212EJ	1	1332-0032
Clamps, Hose to Cord	All	pk/6	1211-0002
S Baffle	All	1	4010-0033
Cleaning Unit Assy, Comp	All	1	6021-0001
a) Cap		1	1313-0007
b) Sponge		pk/5	4021-0001
c) Brush		1	1127-0012
Experimenter Tip Kit, consisting of: 2 ea Tips 1121-0214;0215;0217 1 ea Set Screw; 1 ea Sodr-X-Tractor Filter	All	1	6993-0038

NOTE: Replacement Parts List for Models SX-214; SX-214E; SX-214EJ can be obtained by writing to factory.

PACE
INCORPORATED
9329 Fraser Street
Silver Spring, Md. 20910
Phone: (301) 587-1696
Telex: 89-8476

COSTLY ASSEMBLIES DISCARDED BECAUSE THEY CAN'T BE REPAIRED?

RUBBISH!

THE PACE BENCH-TOP REWORK CENTER MAKES YOUR TRASH CANS OBSOLETE.

The reality of life is that *no one* can really afford to throw away Electronic Assemblies and Modules. Whether you're making or using them, PACE can show you how to fix them right. We know what it takes in the Factory or in the Field to save you time and money Reworking and Repairing assemblies to meet or exceed original specifications.

We've heard stories that modules couldn't be fixed. They were wrong! One technician *trained* and *equipped* by PACE converted a can of rubbish into $60,000 in three weeks and obsoleted the can. And that's just one of the many stories we've heard from thousands of people from Military, Government and Private Industries whom we've trained and equipped.

If there's a gold mine in *your* trash cans, let PACE train and equip your technicians to mine that pot of gold.

TRAINING

The Bench-Top Rework Center has everything it takes to perform successful Rework, Repair and Modification of Electronic Assemblies, everything but the trained mind and hands.

PACE can train your technicians to perform reliable rework and repair ON-SITE at your plant with our *NEW Mobile Training Center.* Qualified PACE instructors will train your Assembly Personnel, Technicians, Q.A. and Service Personnel to perform Rework and Repair that can result in *phenomenal* cost savings to you.

Request Bulletin 800-030 for Training information.

MODEL PRC-150 is a portable, self-contained system for Rework, Repair and Modification of electronic modules, in one integrated package.

PACE POWER SOURCE

provides required forms of Power, Control and Sequencing.

SODR-X-TRACTOR®

for removal of any solder joint configuration.

MINICHINE(TM)

for abrading, milling, drilling and cutting required for circuit board repair.

THERMOPART(TM)

for removing any conformal coatings.

LAPFLO(TM)

for hi-strength reflow soldering.

COMFORM I(TM)

for accurately forming components.

POWER SOURCE

Rework, Repair and Modification encompases a series of processing techniques which demand many types of Power and Control. This PACE Power Source provides therequired forms of Power, Control and Sequencing to effectively accomplish the necessary series of processing techniques described on the following pages.

MECHANICAL POWER OUTPUT
High Torque-Low RPM, drives the MINICHINE System with Two position 'quick connect' for Run and Idle Modes while attached.

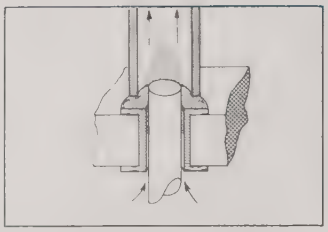
ELECTRICAL POWER OUTPUTS
Two Low Current Power Controlled Receptacles for temperature control of Sodr-X-Tractor and Soldering Iron. One High Current Power Controlled *Universal Cord for 'quick* connect' to pulse powered systems; i.e., ThermoPart, LapFlo and other available systems.

PRESSURE AND VACUUM OUTPUTS
Controlled pressure and vacuum levels and flow rates for operating Sodr-X-Tractor and other air operated systems via 'quick connects.'

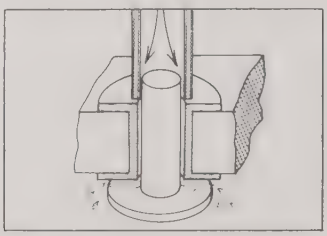
MULTIPLE SEQUENCING
For combining various outputs is incorporated in the system.

MODEL PRC-150 BENCH-TOP REWORK CENTER

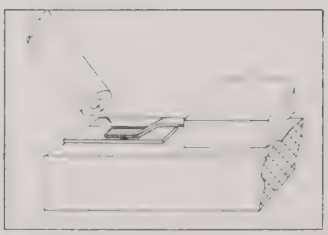
SODR-X-TRACTOR



VACUUM MODE. Solder is rapidly melted and safely removed with vacuum from thru-hole and standoff solder joints. Vacuum Continuum leaves lead free in the hole preventing it from sweating to side walls while cooling pad, hole and lead to prevent heat damage.

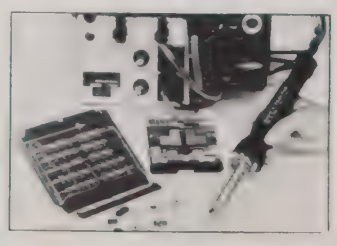


PRESSURE MODE. Removal of blocked or blind side solder joints is accomplished by driving heat through the lead to melt the back side sweat joint. Pressure is then applied to remove the solder and lift the component away from the pad while cooling down the joint area to prevent resweat to pad.



HOT AIR JET MODE. Hot Air Jet Mode of Operation provides capability to reflow lap mounted components and connectors *without touching* the solder joint. Solder is melted and lead lifted free of the solder joint

Hot Air Jet performs many other operations including shrinking tubing, softening conformal coatings for localized removal and reflowing solder Pre-Forms



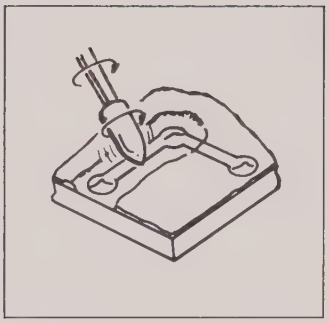
Available as a separate, Complete Sodr-X-Traction System, Model SX-300.

The Sodr-X-Tractor removes any solder joint, regardless of configuration, by combinations of Controlled Heat, Pressure, Vacuum, and Air Flow provided by the PACE Power Source. Co-Axial, In-Line, 'Pencil-Like' design provides accurate Control Sensitivity through easily observable work action, minimum thermal profile, easy-one-hand operation and familiar 'soldering iron' feel.

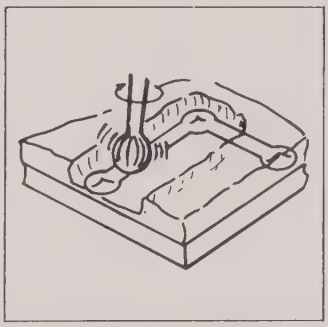
Pressure, Vacuum and Hot Air Jet Modes of Operation solve all types of solder joint removal problems including MICRO-MIN, Matrices, Multi-Layer, Ceramics, Flex Circuits, D.I.P.'s, Flat Packs, TO-Cans, Axial Lead Parts, Connectors, Terminals, Clinched and Unclinched Leads, Multi-Pin Packs, Lap Joints, Thru-Hole Joints, Etc.

MINICHINE

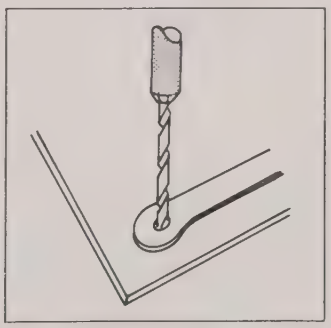
MiniChine is a High Torque-Low RPM power tool with a 'pencil-like' spindle which provides finger tip control for miniature machining operations. System is 'quick connected' to the PACE Power Source with both Idling and Running Modes after connecting.



ABRASION. Localized removal of thin conformal coatings and damaged plating, and workpiece preparation is accomplished with precision abrasive methods.



MILLING. Removal of defective parts, terminals, eyelets and rivets by controlled milling techniques.

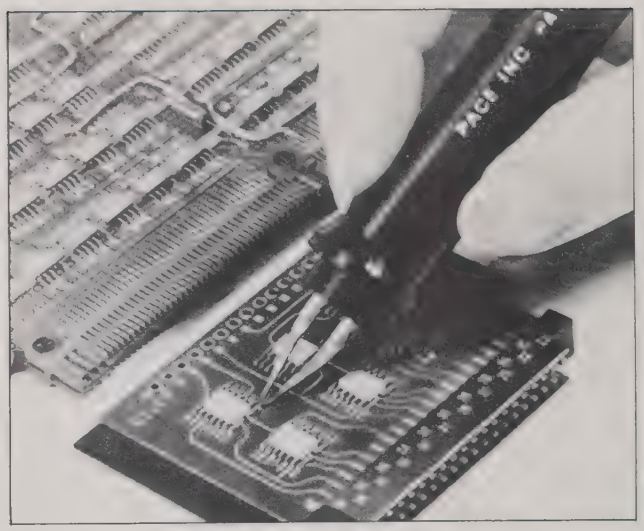


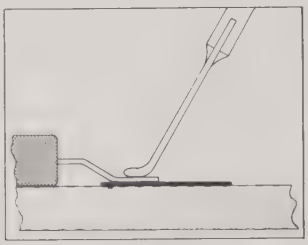
DRILLING. Repair or modification of circuit runs, pads and plated-thru-holes with miniature drilling procedures.

OTHER USES. Slitting, sawing and grinding capabilities are incorporated to suit the multitude of problems found in Rework, Repair and Modification

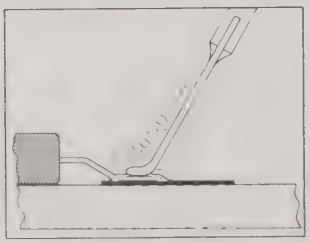
LAPFLO

Lap Flo soldering produces hi-strength reflowed lap solder joints for planar or offset-pad component mounting. Shear strength of the resulting solder joint is equal to or greater than welded lap joints. Leads are soldered individually or in multiples with interchangeable 'quick connect' tips. Broken circuit runs are dependably repaired with this system. The cordless handpiece 'quick connects' to the Universal Cord for controlled heat from the PACE Power Source. The following sequence is accomplished in seconds:

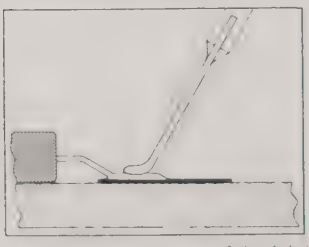




Pre-clamp of leads under controlled pressure prior to application of heat.



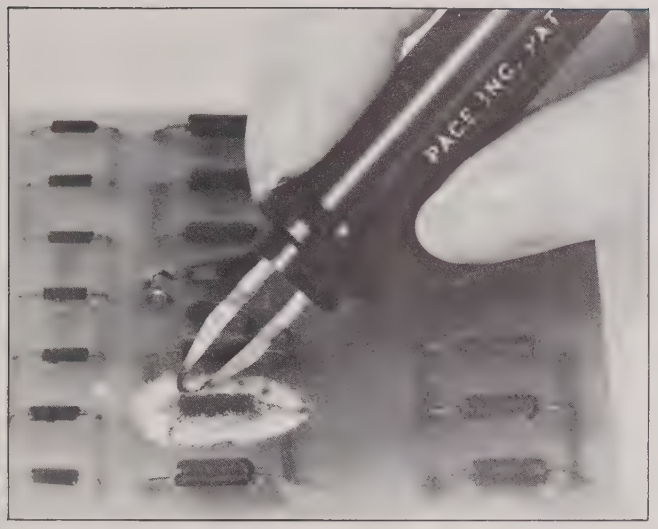
Application of heat causing reflow of the tinned pads and leads while maintaining the clamping action.



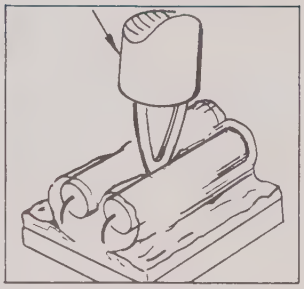
Accelerated cool down of the joint while maintaining stabilized clamping action

Available as a separate, Complete LapFlo Soldering System, Model LS-100.

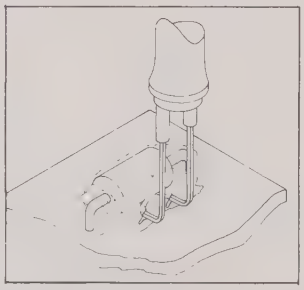
THERMOPART



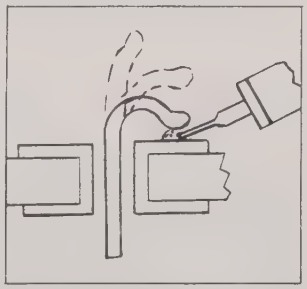
This unique and highly versatile instrument permits localized removal of any thick conformal coating without burning or scorching the work area or the coating material itself. Various Tip Shapes are available to suit a variety of workpiece configurations. The handpiece 'quick connects' to the Universal Cord of the PACE Power Source providing necessary control to prevent melting solder joints or damaging adjacent components.



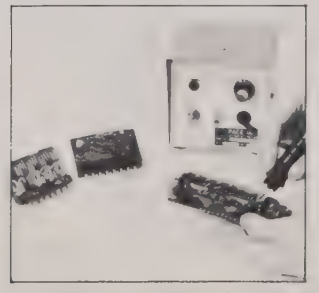
COATING REMOVAL. Coatings are disintegrated or softened utilizing controlled heat via tips which do not cut, but thermally part the coating.



COMPONENT REMOVAL. Components bonded to the surface of the Circuit Board are removed by controlled heat without damage to the Circuit Board.



LEAD STRAIGHTENING. Soldered-in clinched leads are easily straightened without damage to circuit pad, lead or component.



Available as a separate, Complete ThermoPart Coating Removal System, Model TP-100

SPECIFICATIONS AND STANDARD EQUIPMENT

POWER REQUIRED

115 VAC; 50/60 Cycle.
1 Phase.

PHYSICAL DATA

Weight: 25 lbs.
Width, Height, Depth: 7" x 5" x 9-13/16", with Hot Cubbys 11" wide

STANDARD EQUIPMENT

POWER SOURCE including Electrical Controls, Temperature Controls, Flow Controls, Disconnects, Universal Cord & Remote Pedal

SODR-X-TRACTOR complete with Tips, Brushes & Connecting Lines

LAPFLO SYSTEM complete with Tip.

THERMOPART SYSTEM complete with Tip.

MINICHINE SYSTEM complete with Spindle-Shaft and Tool Set

COMFORM I.

HOT CUBBYS complete with Solder Dump and Cleaning Unit

SOLDERING IRON AND TIP.

OPTIONAL ACCESSORIES

Hand Tools and Materials Package

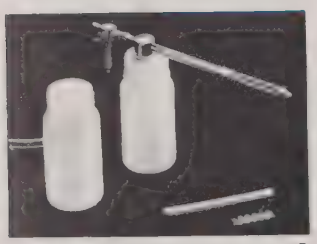
CUSTOM CARRYING CASE for portability in field service work

OTHER SYSTEMS AVAILABLE

MINIATURE SPRAY SYSTEM (a) for coatings, solvents, lubricants and any materials of sprayable consistency

ENVIRONMENTAL PROBE (b) for locating heat caused intermittencies, localized dehumidification, localized accelerated curing of conformal coatings, and trimming circuits containing semi-conductor devices, supplied complete with miniature chambers

VACUUM CLEANING AND HANDLING SYSTEM (c) for cleaning electro-mechanical devices and for handling semi-conductor devices without damaging them.



a

b

c

Represented by:

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INDIANAPOLIS, INDIANA 46240
PHONE AREA (317) 846-5441

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Silver Spring, Maryland 20910
(301) 587-1696

SYSTEMS AND TECHNOLOGY FOR REWORK REPAIR AND MODIFICATION

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Training Aids
Code RTA

NOTES

REPLACEMENT PARTS PRICE SHEET EFFECTIVE DATE: MAY 1976

TRAINING AND PRACTICE MATERIALS

Practice Kits	Part No.	Unit Price (each) 1-9	Quantity Breaks - Price Per Unit 10-24	25-49	50-99	100-249	250& over
Skill Evaluation Kit	6030-0001	$ 7.85	$ 7.40	$ 6.60	$ 6.30	$ 5.50	$ 5.05
Circuit Board only	1200-0002	4.40	4.20	3.75	3.40	3.10	2.90
Eyeletting Tech. Kit	6030-0004	6.00	5.75	4.80	4.30	4.10	3.95
Circuit Board only	1200-0001	4.95	4.75	4.25	3.95	3.45	3.20
LapReflow Soldering Kit	6030-0005	12.65	12.15	10.85	10.15	8.85	8.10
Circuit Board only	1200-0003	2.45	2.25	2.10	2.00	1.80	1.50
I.C. Assy. Kit (Plated thru W/IC	6030-0007	11.85	11.15	10.20	9.50	8.30	7.60
Circuit Board only	1200-0009	6.15	5.80	5.20	4.90	4.30	4.40
Skill Builder Kit	6030-0002	9.80	9.20	8.40	7.85	6.90	6.45
Circuit Board only	1200-0010	7.10	6.70	6.10	5.70	4.95	4.65
I.C. Desoldering Practice Kit	6030-0011	16.85	15.85	14.50	13.50	11.80	10.80
Circuit Board only	1200-0009	6.15	5.80	5.20	4.90	4.30	4.40

TRAINING AND PRACTICE MATERIALS

		100-499	500-999	1000 & Over
1/4 Watt Resistor	1179-0003	$ 5.00/C	$ 4.50/C	$ 3.75/C
1/2 Watt Resistor	1179-0002	5.00/C	4.50/C	3.75/C
IC Flat Pack Type, 14 leads	1200-0004	75.00/C	68.00/C	54.00/C
TO-5 Transistor, 3 lead	1187-0002	40.00/C	36.00/C	28.80/C
TO-18 Transistor, 3 lead	1187-0001	125.00/C	112.50/C	90.00/C
TO-5 IC, 10 lead	1200-0008	120.00/C	108.00/C	86.40/C
DIP, 14 lead	1200-0007	65.00/C	58.50/C	46.80/C
Eyelet (Flat Head)	1347-0026	10.90/C		54.50/M
Funnelet	1347-0002	5.90/C		29.50/M
Turret Terminal	1205-0012	73.35/C		342.30/M
Bifurcated Terminal	1205-0013	101.70/C		474.60/M
Connector Pin	1205-0014	84.35/C		421.60/M
Epoxy Fit, Two-Part	1233-0004	8.50 Kit		
Flux, liquid thinned (Lapflo Soldering)	[illegible]	[illegible]		

ALL PRICES ARE IN ACCORDANCE WITH PACE'S TERMS AND CONDITIONS OF SALE.

Function Accessories
Code RFA

REPLACEMENT PARTS PRICE SHEET

EFFECTIVE DATE: MAY 1976

FUNCTION ACCESSORY REPLACEMENT PART	PART NO.	PRICE

SX-200 SOLDER SUCKER TIPS -- SINGLE PACKAGE PRICES

SUPER TIPS -- Heavy Walled, Chamfered, Dual Clad, Copper

I.D. Nom. Inches	I.D. Nom. MM	O.D. Ref. Inches	O.D. Ref. MM	Part Number	Price
.061	1.549	.104	2.642	1121-0217	$18.00 pk/25
.050	1.270	.085	2.159	1121-0216	19.00 pk/25
.036	.914	.072	1.829	1121-0215	19.00 pk/25
.025	.635	.060	1.524	1121-0214	21.00 pk/25
.018	.457	.053	1.346	1121-0213	25.00 pk/25

COPPER TIPS -- Dual Clad, Thin Walled

.095	2.413	.125	3.175	1121-0091	15.00 pk/25
.061	1.549	.100	2.540	1121-0092	17.50 pk/25
.036	.914	.087	2.210	1121-0093	17.50 pk/25
.025	.635	.080	2.032	1121-0094	17.50 pk/25

ALLOY TIPS -- Chamfered, Dual Clad

.068	1.727	.125	3.175	1121-0115	17.50 pk/25
.036	0.914	.072	1.829	1121-0117	25.00 pk/25
.025	0.635	.060	1.524	1121-0118	25.00 pk/25

DOUBLE WALL TIPS -- Dual Clad, Copper and Steel

.057	1.447	.125	3.175	1121-0097	31.00 pk/25
.036	0.914	.104	2.642	1121-0098	38.00 pk/25
.025	0.635	.102	2.591	1121-0099	38.00 pk/25

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Function Accessories
Code RFA

REPLACEMENT PARTS PRICE SHEET

EFFECTIVE DATE: MAY 1976

FUNCTION ACCESSORY REPLACEMENT PART	PART NO.	PRICE

SX-200 SOLDER SUCKER TIPS -- QUANTITY DISCOUNTS

SIZES AND TYPES MAY BE MIXED

Part Number	4 - 9 Pkg Price	10 - 24 Pkg Price	25 - 49 Pkg Price	50 - 99 Pkg Price	100 & up Pkg Pr.
1121-0091	$14.25	$13.50	$12.75	$12.00	$10.50
1121-0092	16.63	15.75	14.88	14.00	12.25
1121-0093	16.63	15.75	14.88	14.00	12.25
1121-0094	16.63	15.75	14.88	14.00	12.25
1121-0217	17.10	16.20	15.30	14.40	12.60
1121-0216	18.05	17.10	16.15	15.20	13.30
1121-0215	18.05	17.10	16.15	15.20	13.30
1121-0214	19.95	18.90	17.85	16.80	14.70
1121-0213	23.75	22.50	21.25	20.00	17.50
1121-0115	16.63	15.75	14.88	14.00	12.25
1121-0117	23.75	22.50	21.25	20.00	17.50
1121-0118	23.75	22.50	21.25	20.00	17.50
1121-0097	29.45	27.90	26.35	24.80	21.70
1121-0098	36.10	34.20	32.30	30.40	26.60
1121-0099	36.10	34.20	32.30	30.40	26.60

BULK PACK

Quantities of 2500 each and up with bulk packaging (no mixing sizes)

Price: 40% discount from single tip price.

ALL PRICES ARE IN ACCORDANCE WITH PACE'S TERMS AND CONDITIONS OF SALE.

Work Aids
Code RWA

REPLACEMENT PARTS PRICE SHEET EFFECTIVE DATE: MAY 1976

WORK AID REPLACEMENT PART	PART NO.	PRICE
POL-25 STEREO MICROSCOPE	6007-0003	269.00 COMP.
Eyepiece, 10X	1106-0003	75.00 pr
Horizontal Arm Support Assy.	6000-0023	15.50 ea
Optional		
Portable Universal Base, MTG-2 w/Vertical Post	6015-0027	29.00 ea
POL-30 STEREO MICROSCOPE	7007-0007	294.00 COMP.
Eyepiece, 10X	1106-0003	75.00 pr
Horizontal Arm Support Assy.	6000-0023	15.50 ea
ST-10 SENSATEMP, PORTABLE	7000-0021	$ 88.00 COMP.
Thermocouple Assy.	6000-0030	21.75 ea
MP-6 WORK HANDLING UNIT	7015-0009	105.00 COMP.
Universal Arm w/knob	6015-0011	11.75 ea
Tension Arm Assy. w/knob	6015-0020	24.50 ea
Universal Holders	6015-0026	17.50 pr
Optional Cross Bar Ext.	1344-0007	17.25 ea
Adjustment Support Assy.	6015-0021	49.00 ea

ALL PRICES ARE IN ACCORDANCE WITH PACE'S TERMS AND CONDITIONS OF SALE.

Tools and Materials
Code RTM

REPLACEMENT PARTS PRICE SHEET EFFECTIVE DATE: MAY 1976

TOOLS AND MATERIALS REPLACEMENT PART	PART NO.	PRICE
T-300 MATERIALS KIT	6993-0007	$ 53.00 KIT
Coating Kit	6999-0003	13.25 ea
Solvent Kit	6997-0001	4.65 ea
Brush, stiff	1127-0001	12.00 pk/10
Bonding Kit	6999-0002	14.50 ea
Platen	1143-0001	1.50 ea
Spatulas, wood	1123-0001	3.00/C
Swabs, cotton	1123-0002	2.00/C
Epoxy, Part 1 & 2	6999-0001	4.50 set
Mixing cup	1311-0013	.85 ea
Chem. Strip Kit	6998-0001	7.95 ea
Flux, liquid	6994-0001	3.50 ea
T-400 TOOLS KIT	6993-0029	124.00 KIT
Magnifier	1106-0001	2.50 ea
Pliers, diag. cutting	1100-0006	10.95 ea
Pliers, flat nose	1100-0002	9.95 ea
Pliers, extra fine needle nose	1100-0003	10.85 ea
Pliers, short chain needle nose	1100-0004	9.90 ea
Pliers, round nose	1100-0001	9.95 ea
Clamp, Heat Sink curved	1100-0061	9.90 ea
Solder, roll	1243-0001	13.50 rl
Solder, Disp. Pak	6996-0001	2.90 pk
Mirror, Ext. 45°	1106-0012	3.85 ea
Tweezer, serrated	1100-0041	6.10 ea
Tool Set, Miniature, 21 pcs.	7016-0004	18.50 ea
Oxide Remover, red line	1129-0014	19.25 pk/10
Oxide Remover, grey line	1129-0013	19.25 pk/10
Heat Sinks, Miniature	1209-0001	2.00 pk/5
Plug, A.C. Adapter	1207-0024	1.95 ea
Soldering Iron w/Tips	1102-0004	23.00 ea
Heater, Soldering Iron	1283-0003	11.50 ea
Replacement Tips:		
Chisel Tip 1/8"	1121-0130	12.50 pk/5
Chisel Tip 1/16" min.	1121-0131	13.50 pk/5

ACCOPRESS®

25970	YELLOW
25971	BLACK
25972	LIGHT BLUE
25973	DARK BLUE
25974	LIGHT GRAY
25975	LIGHT GREEN
25976	DARK GREEN
25977	TANGERINE
25978	RED
25979	EXECUTIVE RED

GENUINE PRESSBOARD

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